

# 6BA6

## Remote-Cutoff Pentode

### 7-PIN MINIATURE TYPE

#### GENERAL DATA

##### Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC). . . . .  $6.3 \pm 10\%$  volts ←  
Current at 6.3 volts. . . . . 0.3 amp ←

Direct Interelectrode Capacitances:

	<i>Without External Shield</i>	<i>With External Shield<sup>▲</sup></i>	
Grid No.1 to plate. . . .	0.0035 max.	0.0035 max.	$\mu\mu\text{f}$
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater. . . . .	5.5	5.5	$\mu\mu\text{f}$
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater .	5	5.5	$\mu\mu\text{f}$

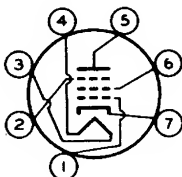
##### Characteristics, Class A<sub>1</sub> Amplifier:

Plate Supply Voltage. . . .	100	250	volts
Grid No.3 . . . . .	<i>Connected to cathode at socket</i>		
Grid-No.2 Supply Voltage. .	100	100	volts
Cathode Resistor. . . . .	68	68	ohms
Plate Resistance (Approx.).	0.25	1	megohm
Transconductance. . . . .	4300	4400	$\mu\text{mhos}$
Plate Current . . . . .	10.8	11	ma
Grid-No.2 Current . . . . .	4.4	4.2	ma
Grid-No.1 Voltage (Approx.) for transconductance ( $\mu\text{mhos}$ ) = 40. . . . .	-20	-20	volts

##### Mechanical:

Operating Position. . . . . Any  
Maximum Overall Length. . . . . 2-1/8"  
Maximum Seated Length . . . . . 1-7/8"  
Length, Base Seat to Bulb Top (Excluding tip) . 1-1/2"  $\pm$  3/32"  
Diameter. . . . . 0.650" to 0.750" ←  
Dimensional Outline . . . . . See *General Section*  
Bulb. . . . . T5-1/2  
Base. . . . . Small-Button Miniature 7-Pin (JEDEC No.E7-1)  
Basing Designation for BOTTOM VIEW. . . . . 7BK ←

Pin 1 - Grid No.1  
Pin 2 - Grid No.3,  
Internal  
Shield  
Pin 3 - Heater



Pin 4 - Heater  
Pin 5 - Plate  
Pin 6 - Grid No.2  
Pin 7 - Cathode

← Indicates a change.



RADIO CORPORATION OF AMERICA  
Electron Tube Division  
Harrison, N. J.

DATA  
3-61

# 6BA6

## AMPLIFIER — Class A<sub>1</sub>

### Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE. . . . .	330 max. volts
GRID No.3 (SUPPRESSOR GRID). . . . .	Connect to cathode at socket
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE. . . . .	330 max. volts
GRID-No.2 VOLTAGE. . . . .	See <i>Grid-No.2 Input Rating Chart</i> at front of Receiving Tube Section
GRID-No.1 (CONTROL-GRID) VOLTAGE:	
Negative-bias value. . . . .	55 max. volts
Positive-bias value. . . . .	0 max. volts
GRID-No.2 INPUT:	
For grid-No.2 voltages up to 165 volts. . . . .	0.7 max. watt
For grid-No.2 voltages between 165 and 330 volts. . . . .	See <i>Grid-No.2 Input Rating Chart</i> at front of Receiving Tube Section
PLATE DISSIPATION. . . . .	3.4 max. watts
PEAK HEATER-CATHODE VOLTAGE:	
Heater negative with respect to cathode. . . . .	200 max. volts
Heater positive with respect to cathode. . . . .	200 <sup>●</sup> max. volts

▲ With external shield JEDEC No.316 connected to cathode.

● The dc component must not exceed 100 volts.

→ Indicates a change.

RADIO CORPORATION OF AMERICA  
Electron Tube Division

Harrison, N. J.

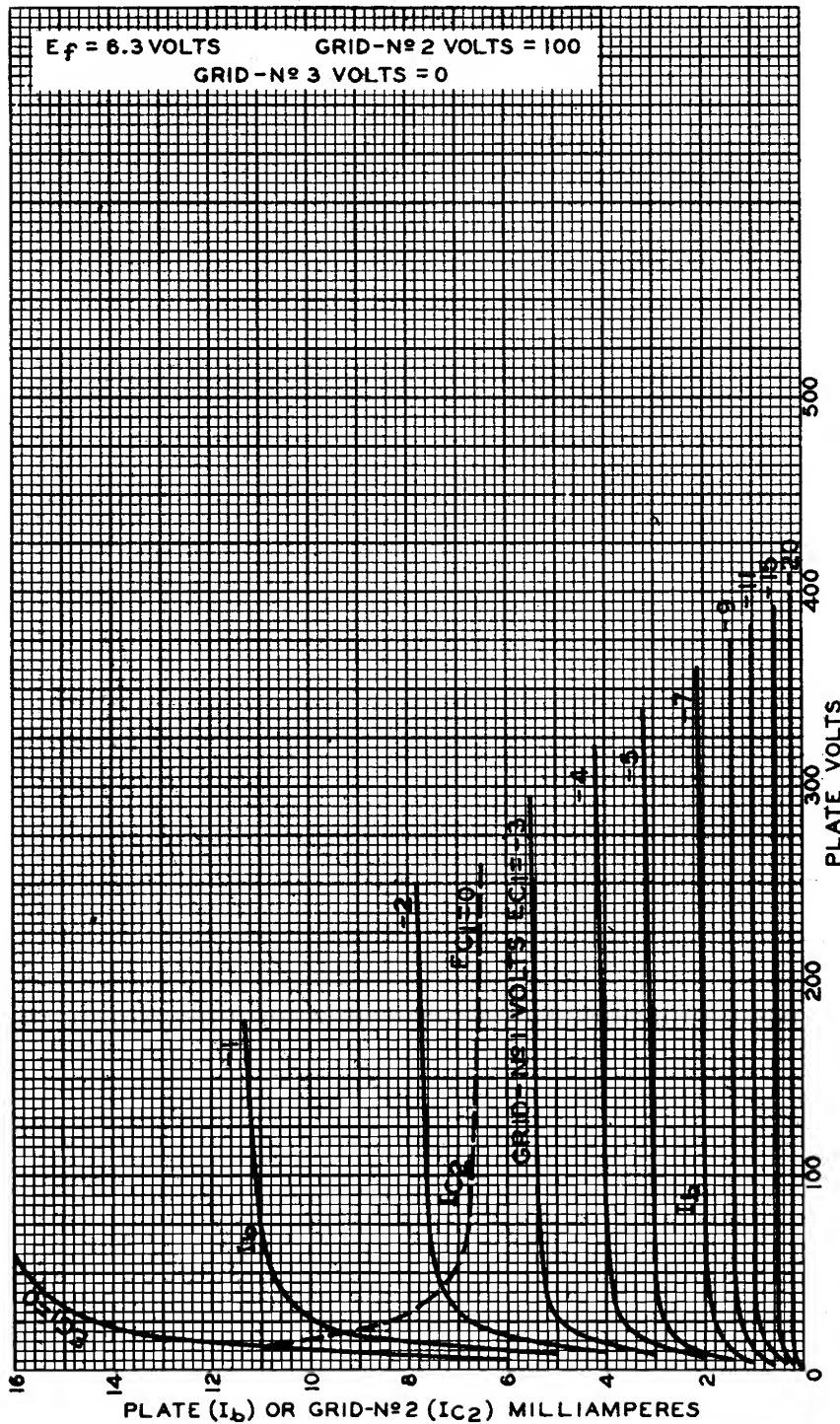




6BA6

6BA6

# AVERAGE PLATE CHARACTERISTICS



OCT. 22, 1945

RCA VICTOR DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

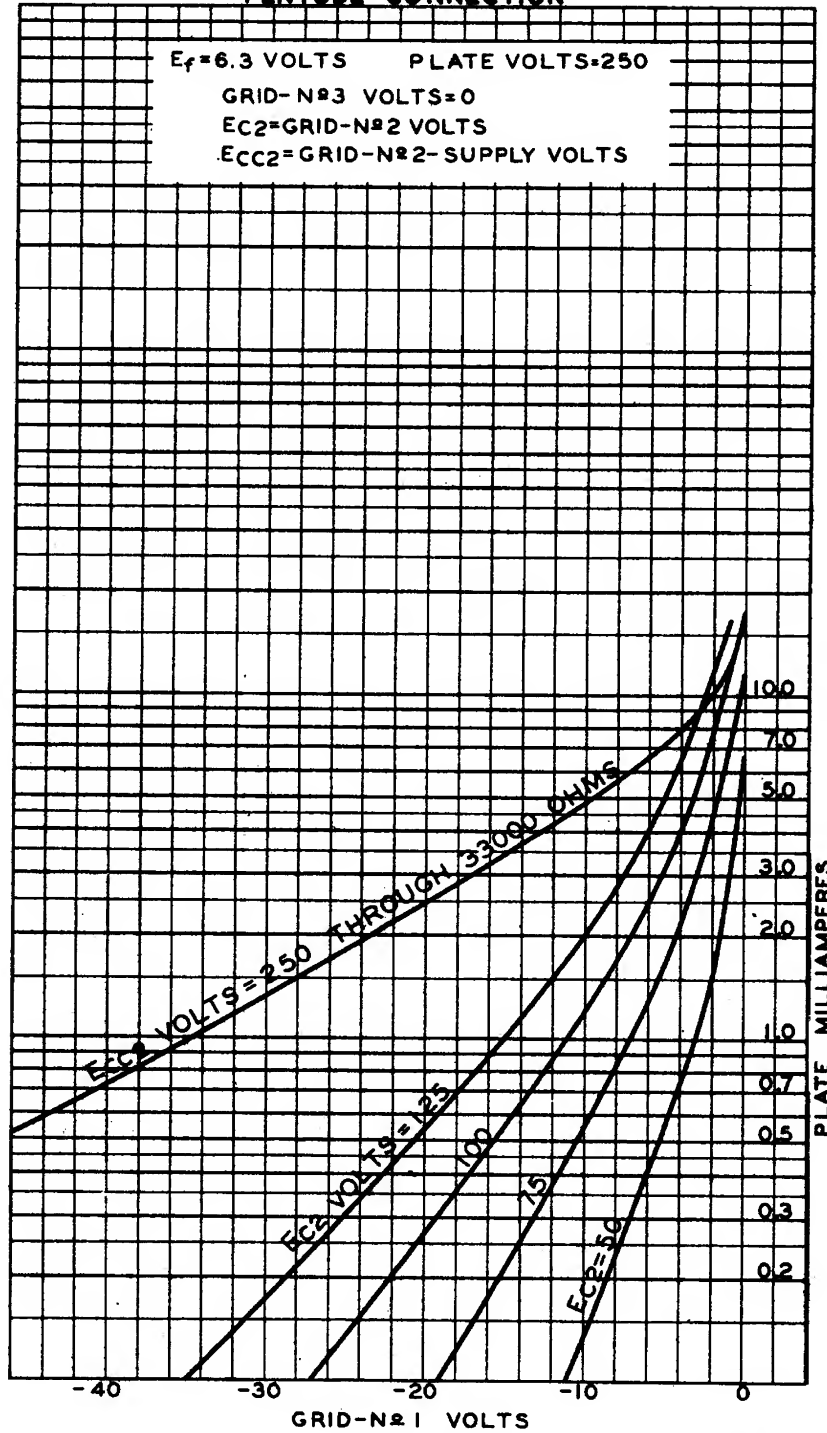
92CM-6609

6BA6



6BA6

# AVERAGE CHARACTERISTICS PENTODE CONNECTION



NOV. 12, 1945

RCA VICTOR DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

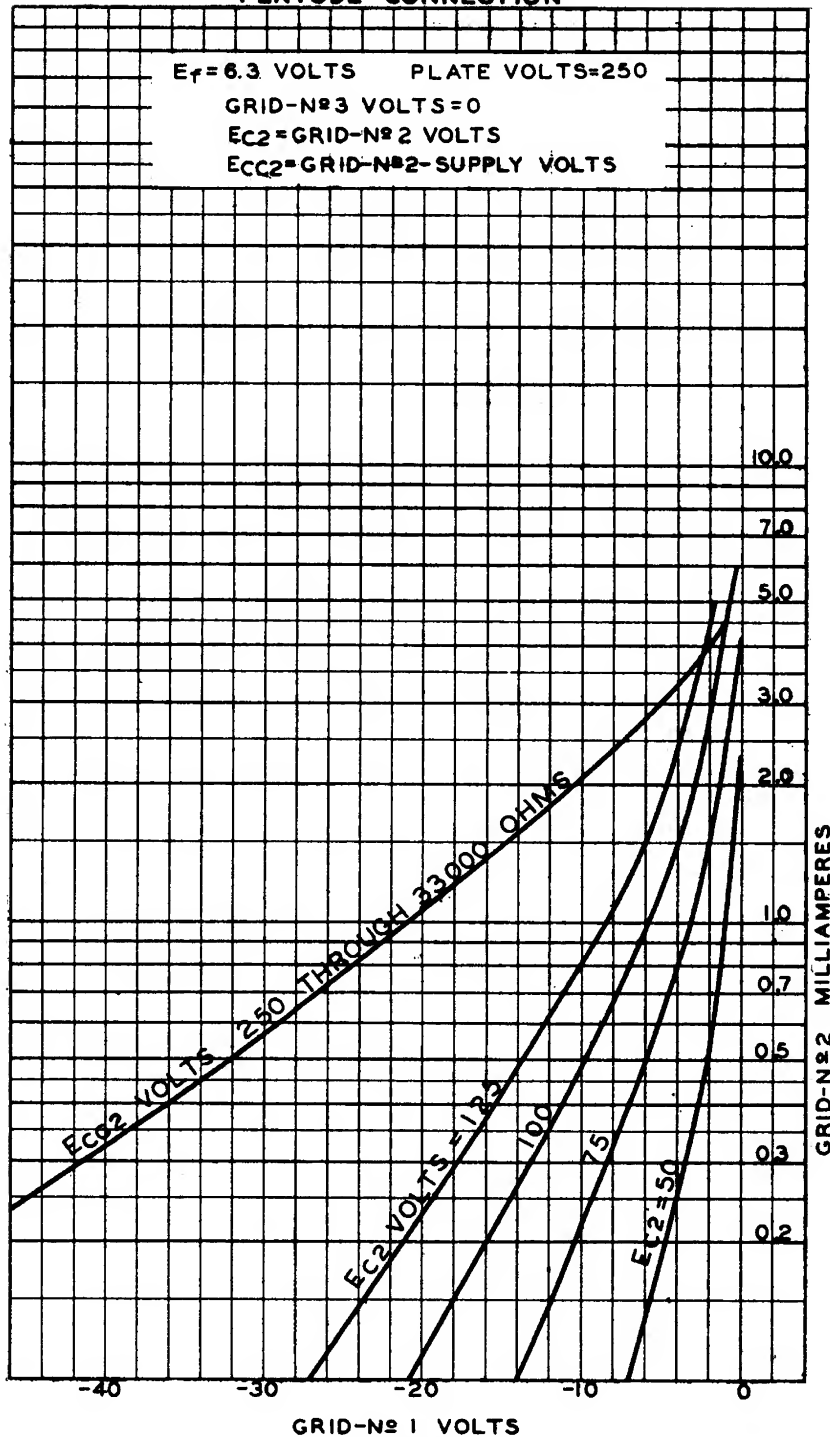
92CM-6622



6BA6

6BA6

# AVERAGE CHARACTERISTICS PENTODE CONNECTION



NOV. 12, 1945

TUBE DEPARTMENT  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

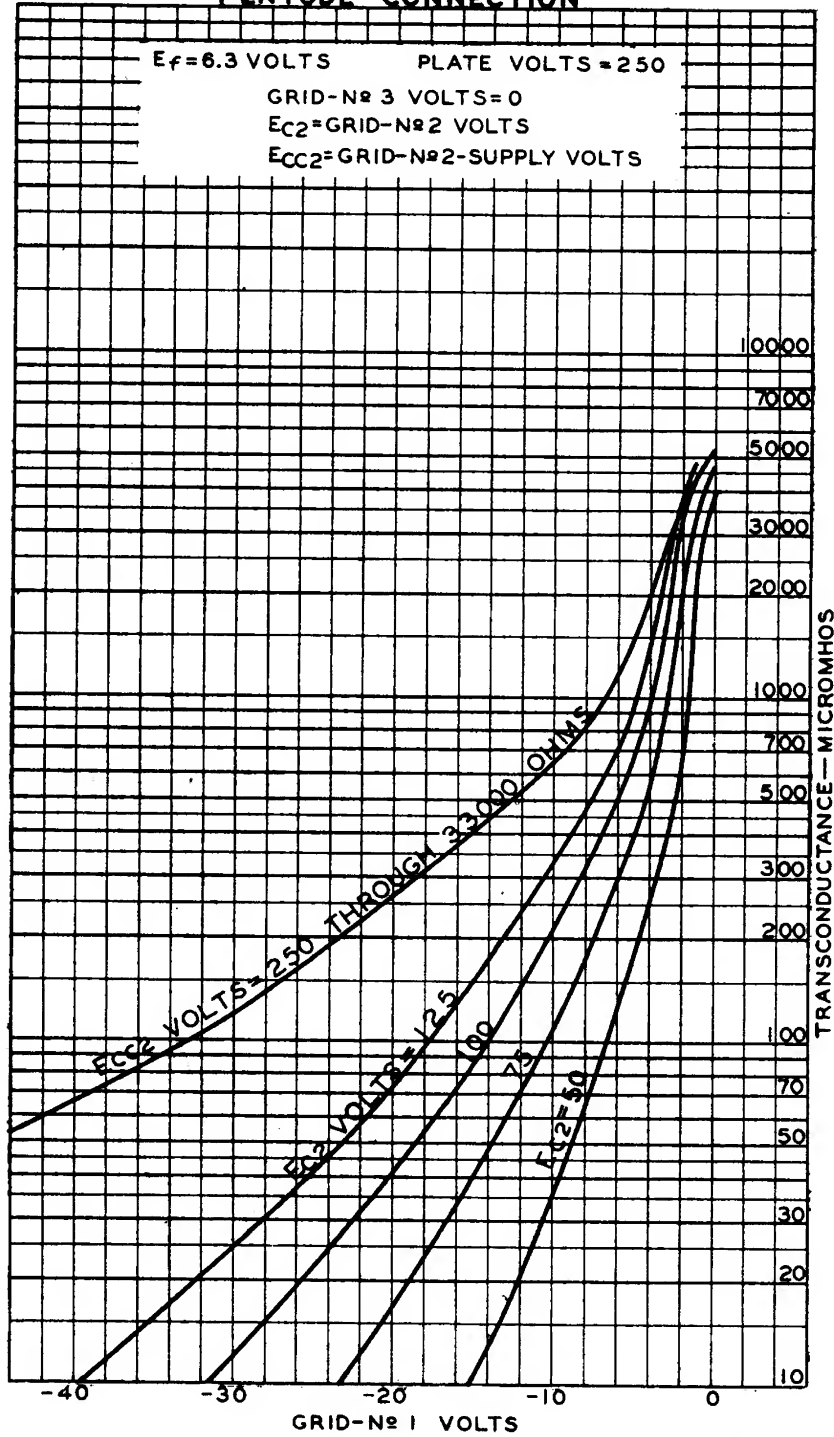
92CM-6620

6BA6



6BA6

# AVERAGE CHARACTERISTICS PENTODE CONNECTION



DEC. 10, 1951

TUBE DEPARTMENT  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6621R1